NASHUA RIVER GREENWAY FOREST LEGACY AREA

Application for Legacy Area Expansion April 5, 2001

Approval of Legacy Area Expansion June 1, 2001

Warren E. Archey, Chairman Massachusetts Forest Legacy Committee



COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



REGION V
P.O. BOX 1433, 740 SOUTH STREET, PITTSFIELD, MA 01202
PHONE 413-442-8928, FAX 413-442-5860
www.state.ma.us/dem

May 9, 2001

Jane Swift GOVERNOR

Bob Durand SECRETARY

Peter C. Webber COMMISSIONER Kathryn P. Maloney, Director Northeastern Area, State & Private Forestry 11 Campus Boulevard, Suite 200 Newtown Square, PA 19073-3200

Dear Kathryn:

I recently sent a letter to John Nordin asking that the Nashua River Greenway Forest Legacy Area be modestly increased in size through an FLA boundary change. John approved that and it constitutes Enclosure 1.

Since then though, the same public support group showing interest in that boundary change has thought more broadly and has suggested that even further consideration of areas to the west would be justified, especially given the nature of the protection issues (primarily public water supply) and the breadth and the depth of public support. This is in keeping with our initial public involvement process shown in Enclosure 1 (an excerpt from the Massachusetts AON in the letter to John Nordin). Especially notable is water supply protection issue as put forward in the AON -- this amendment is offered in direct response to that. Additionally, the boundary change proposal meets Forest Legacy Program eligibility criteria. Moreover, it should be noted that if approved, this proposal would subsume the previous approval of John Nordin.

Enclosure 2 represents the rationale which underpins the proposal and was developed by Brandon Kibbe, then of the Massachusetts Watershed Coalition, with substantial input from an advisory committee as noted in Enclosure 1. Also included in that rationale are the proposed boundaries of the Nashua River Greenway Forest Legacy Area.

Enclosure 3 is a series of maps depicting existing Massachusetts Forest Legacy Areas, and in the proposed expanded Nashua River Greenway Forest Legacy Area, are maps depicting: existing Forest Legacy Areas, locus map, land use, protected open space and water supplies.

Kathryn Maloney May 9, 2001 Page 2

| Map 1 | Massachusetts Forest Legacy Areas |
|-------|--|
| Map 2 | Locus map (Nashua River Greenway) |
| Map 3 | Land use (Nashua River Greenway) |
| Map 4 | Protected Open space (Nashua River Greenway) |
| | Water supplies (Nashua River Greenway) |

Enclosure 4 includes letters of support for the Nashua River Greenway Forest Legacy Area expansion from:

- Nashua River Watershed Association (sponsor of the Nashua River Greenway)
- · Massachusetts Watershed Coalition
- Sudbury Valley Trustees
- Leominster Land Trust
- City of Worcester Department of Public Works

Clearly, water resource protection through forestland ownership is the primary emphasis in this modification, but also realized will be wildlife values, rare, threatened and endangered species habitat protection, traditional forestry activities, and increased recreational opportunities. The FLA sponsor, the Nashua River Watershed Association, has notified applicable units of government regarding the FLA boundary change and is prepared to announce an approval once that is secured. A substantial benefit to the boundary change also, is that the new boundary will make this area coincident with the Secretary of Environmental Affairs "Focus Areas" which will allow increased state cost-share on eligible projects. Consequently, we urge your approval so that we may increase protection of vital forestland in north central Massachusetts.

Sincerely,

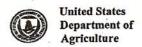
Warren E. Archey

Chief, Bureau of Forestry

Chairman, Massachusetts Forest Legacy Committee

cc Elizabeth Ainsley Campbell, Nashua River Watershed Association Brandon Kibbe, Sudbury Valley Trustees Kathleen O'Connor, Massachusetts Watershed Coalition Deirdre Raimo, USDA Forest Service

Enclosures



Forest Service Northeastern Area State and Private Forestry 11 Campus Boulevard Suite 200 Newtown Square, PA 19073

File Code: 3200

Date: June 1, 2001

Warren E. Archey Chief, Bureau of Forestry Department of Environmental Management Division of Forests and Parks, Region V P.O. Box 1433 Pittsfield, MA 01202

Dear Warren:

This is in response to your letter of May 9, 2001, requesting approval for a boundary adjustment to the Nashua River Greenway Forest Legacy Area (FLA), which essentially connects it to the North Quabbin Corridor FLA. I understand that the decision last year, to adjust the boundary of the Nashua River Greenway motivated those supporting the boundary change to investigate an expansion west to include more lands that met the Eligibility Criteria set forth in your Assessment of Need. The proposed expansion area offers the opportunity to make an impact on the water supply goal of the Nashua River Greenway FLA by increasing the available forest lands that harbor water supplies. Also, the expanded area increases the opportunity for Massachusetts to share the cost of the program because Massachusetts Secretary of Environmental Affairs has identified a land-acquisition "Focus Area" coincident with the proposed expanded FLA.

In reviewing the boundary change description a few discrepancies between the map and the description were noted. For the description to match the map, the following changes (in bold) should be made:

2nd direction from beginning: Thence southerly along Hollis Street to the intersection with Route 113, a distance of 1.9 miles,

3rd direction from beginning: Thence westerly along Route 113 to Woods Court, a distance of 0.3 miles,

Between the 8th and 9th direction from beginning add: Thence southerly along Interstate 495 to Interstate 290, a distance of 15.0 miles,

I approve of the boundary adjustment as depicted in your map and described with the above changes for this Forest Legacy Area.

Sincerely,

KATHRYN P. MALONEY

Area Director

Cc: Deirdre Raimo Robin Morgan Rick Cooksey





COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



DIVISION OF FORESTS AND PARKS - REGION V P. O. BOX 1433, PITTSFIELD, MA 01202 413-442-8928 FAX 413-442-5860

Argeo Paul Cellucci

Jane Swift LIEUTENANT GOVERNOR

Robert A. Durand SECRETARY

Peter C. Webber COMMISSIONER December 4, 2000

ENCLOSURE

Mr. John Nordin, Acting Director State & Private Forestry USDA Forest Service 11 Campus Boulevard, Suite 200 Newtown Square, PA 19073

Dear John:

In keeping with our renewed cooperative land conservation program in Massachusetts and the substantial interest lately shown in the Forest Legacy Program, I would like to expand the Nashua River Greenway slightly to the west to accommodate that interest. In expanding the Forest Legacy area, I am referring to the Forest Legacy Program Implementation Guidelines, dated August 15, 1996, which states in part, "Once designated, FLAs and resulting map of FLAs may be modified or amended upon recommendation of the State Lead Agency if future conditions make changes necessary. Proposed revisions shall be recommended to the appropriate FS Region/Area/Institute for approval before taking effect". As Chief of the Bureau of Forestry, designated Forest Legacy Lead Agency, by William Weld, Governor, I am forwarding this request for Forest Legacy Area expansion.

With the above as backdrop, I am enclosing an excerpt from Forest Legacy Needs Assessment – Massachusetts having to do with the original logic used in the establishment of Nashua River Greenway (Enclosure 1). At a November 21, 2000 meeting called by the Massachusetts Watershed Coalition, expressly for the purpose of expanding the Forest Legacy Area, unanimous interest was expressed in expanding the FLA westward. Those names and affiliations constitute Enclosure 2.

It may be noted in Enclosure 3 that the Nashua River Greenway Forest Legacy Area is in three scattered and relatively small parcels totaling 6,538 acres. The proposed expansion would be to the west of the Squannacook Confluence shown on the second map of Enclosure 3. The existing Forest Legacy Area is shown in yellow and the proposed addition is shown in green. The proposed Forest Legacy

printed on recycled paper

Mr. John Nordin December 4, 2000 Page 2

Area expansion would seek to protect diverse wildlife habitat, including habitat of rare species with few instances of exotic invasive species. This area is extensively used presently by recreationists in its current forested condition, pointing to the dangers of the threat of conversion to subdivisions, a threat already being realized nearby. Most threatened though, is the effect on water quality which, if the site were developed would profoundly affect the proposed site of a Squannacook public well for the town of Shirley. The additional open space realized by an expanded Forest Legacy Area would also have an appreciable positive effect on adjacent conservation areas, including the Sqannacook Wildlife Management Area and the Hunting Hills Wildlife Management Area, both managed by the MA Division of Fisheries and Wildlife. Additionally, to the east is the J. Harry Rich State Forest, managed by the MA Division of Forests and Parks. The proposed boundaries constitute Enclosure 4. The increased size and placement of the proposed Forest Legacy Area is in clear keeping with the stated objectives in the original Forest Legacy Area designation noted in Enclosure 1. Those objectives include: riparian and floodplain forest protection, open space threatened by imminent development and provides protection for public water supply, passive recreations and protection of endangered species habitat.

I believe that this boundary adjustment will help significantly to solidify open space protection in the Nashua River Greenway.

Sincerely,

Warren E. Archey

Chief, Bureau of Forestry

Chairman, Massachusetts Forest Legacy Committee

Executive Summary For Proposed Massachusetts Forest Legacy Area:

"Nashua River Greenway Forest Legacy Area"

I. MAP

Refer to maps and boundary descriptions on pp. D-13 through D-18 of the Assessment of Need.

II. DESCRIPTION OF EACH IMPORTANT FOREST AREA

- A. Three important forest areas are within this proposed Forest Legacy Area (FLA) that is known as the "Nashua River Greenway". The three sections are the "North Nashua/Cook Conservation FLA" (Section I), "Pepperell-Dunstable FLA" (Section II) and "Squannacook Confluence FLA" (Section III).
- B. These three sections were chosen because presently they are three of the largest unprotected forested areas in the Greenway, a part of the 538 square mile Nashua River Watershed of which 450 square miles are in the Bay State.
- C. The Nashua River, one of the major rivers in the Commonwealth, rises in the Wachusett Reservoir in Clinton/Boylston, and flows north where it joins the Merrimack River in Nashua, NH. The Merrimack River is a focus of attention by the U.S. Environmental Protection Agency (EPA).
- D. The goal of the Greenway is to permanently protect the natural resource values and beauty of the Nashua River and its major tributaries, the Squannacook, Nissitssit and Stillwater Rivers. Over the past two decades, more tan 84 miles of riverbanks have been conserved, compromising over 7,400 acres of land. People are encouraged to quietly enjoy these beautiful lands.
- III. SUMMARY OF IMPORTANT ENVIRONMENTAL VALUES AND HOW (TYPE OF CONSERVATION EASEMENT) THEY WILL BE PROTECTED AND CONSERVED.
 - A. Section 1: North Nashua/Cook Conservation Forest Legacy Area: expands the protected riparian corridor; links existing protected greenway lands or other protected lands such as the Leominster and Lancaster State Forests and the Cook Conservation Area; addresses habitat fragmentation and enlarges the acreage of protected riparian and floodplain forest; maintains open-space in an area with high development potential because of its close proximity to the cities of Leominster and Fitchburg; abuts area targed for potential expansion of the Oxbow National Wildlife Refuge.
- B. Section 2: Pepperell-Dunstable Forest Legacy Area is the northern-most link of the Greenway between protected areas to the south in the town of Groton and those extending to the New Hampshire state line. It includes the Mass. Dept. of Environmental Management

- (DEM) protected rail corridor used for recreation. The ecologically sensitive land between the Nissitissit River and its confluence with the Nashua River is a focus of protection of activities because it is flood plain and ideal wildlife habitat. Section II contains "Estimated Habitats" of rare wetlands wildlife, so designated by the Mass. Natural Heritage Endangered Species Program.
 - C. Section 3: Squannacook Confluence Forest Legacy Area harbors the Squannacook River, one of the best trout streams in Eastern Mass. The Mass. Div. of Fisheries and Wildlife is focusing much of its limited economic resources here. The entire length of the river is listed in the Massachusetts "Atlas of Estimated Habitats of State-Listed Rare Wetland Wildlife". Additional purchases of conservation easements would help insure the protection of this scenic and sensitive area. Furthermore, it would help to complete the linkage between the protected Groton conservation land and DEM's J. Harry Rich State Forest. Section 3 protects the riparian forest and is part of the public water supply watershed for the town of Shirley. Also it is used extensively for recreation by the public.

A. Conservation Easements for tracts should address:

- 1. Development Rights.
- 2. Limited motorized access for trail construction and/or maintenance, wildlife habitat improvements and management of rights retained by owners.
- 3. Limited excavation of soil or minerals including sand and gravel.
- 4. Public access for passive recreation and to the river banks.
- 5. Possible acquisition of rights to protect the aesthetics of the FLA.
- 6. Possible acquisition of rights to practice forest management that enhances potable water and wildlife habitats.
- 7. Continuation of traditional forest and agricultural uses.
- 8. Protection of forested watershed.

IV. LIST OF PUBLIC BENEFITS TO BE DERIVED

- A. Scenic Quality
- B. Public Access for recreation.
- C. Protection and conservation of fish and wildlife habitat.
- D. Protection of public and private water supplies and recharge areas.
- E. Continuation of traditional forest uses extensive rather than intensive management.
- F. Floodwater storage
- G. Filtering of runoff to protect water quality.

V. IDENTIFICATION OF GOVERNMENTAL ENTITY OR ENTITIES THAT MAY BE ASSIGNED MANAGEMENT RESPONSIBILITY

- A. U.S. Fish and Wildlife Service
- B. Commonwealth of Massachusetts: Division of Forest and Parks; Division of Fisheries and Wildlife
- C. Worcester and Middlesex Counties

D. Towns of:

Dunstable Pepperell Harvard Groton Lancaster Shirley

VI. DOCUMENTATION OF THE ANALYSIS AND PUBLIC INVOLVEMENT PROCESS

- A. Discussions and support of forest Legacy with the following groups:
 - 1. Mass DEM land acquisition staff and Div. of Forests and Parks
 - 2. Nashua River Watershed Association
 - 3. Greenway Committees for the towns of Dunstable, Pepperell, Groton and Lancaster
 - 4. Mass. Div. of Fisheries and Wildlife
 - 5. U.S. Fish and Wildlife Service
 - 6. Fish and Wildlife Foundation (national)
 - 7. Massachusetts Correctional Institution
- B. Public support for the three Forest Legacy Sections shown by:
 - 1. Acquisition by the Commonwealth of Massachusetts, Dept. of Environmental Management of: 506 acres as the J. Harry Rich State Forest and abutting 11 milelong abandoned railroad bed as a recreation trail; 220 acres as the Lane-Cornerford Conservation Area.
 - 2. Acquisition by the Commonwealth of Massachusetts, Division of Fisheries and Wildlife of: 725 acres as the Squannacook Wildlife Management Area; 923 acres as the Bolton Flats Wildlife Management Ara.
 - 3. Acquisition by the U.S. Fish and Wildlife Service of the 662 acres as the Oxbow Wildlife Refuge. .
 - 4. Presently there is active Congressional and local support to expand the Oxbow Wildlife Refuge by about 4,800 acres.
 - 5. Acquisition of the Massachusetts Correctional Institution through a conservation easement of over one mile of riverbank trail.
 - 6. Acquisition by the Town of Lancaster of 412 acres as the Cook Conservation Area.
 - 7. Letter of Support from Governor William F. Weld.
 - 8. Active congressional support by Congressman Chester Atkins that resulted in authorization of Forest Legacy funds to the State of in the FY 1992 Appropriations upon completion of the AON and approved by the U.S. Secretary of Agriculture.

C. Public Announcements

- 1. News article by Stan Feeman on "Fragmentation of forest land threatens quality of resources" in the Springfield Union-News, September 13, 1991, promotes woodland retention.
- News article by Fred Contrada on "Forest preservation program may reverse state's loss of woodlands" in the Springfield Sunday Republican, January 5, 1992, talks about the Forest Legacy Program in Massachusetts.

- 3. Open space plans for the Greenway were developed by the Nashua River Watershed Association, local Greenway Committees and municipal Conservation Commissions with public input. The Greenway is named as a Conservation Goal in open space plans of the river communities of Fitchburg, Leominster, Lancaster, Clinton, Bolton, Harvard, Shirley, Groton and Pepperell.
- 4. The Nashua River Greenway management Plan was completed in 1984, and served as a basis for the designation of the Nashua River as a Community Scenic River. In order to attain this Scenic River status, it was necessary for the governing bodies of the riverfront communities to approve the goals for the Nashua River Greenway Management Plan. Local approval was gained through a series of public meetings held by the Selectmen of each river town.
- 5. Riverfront communities established local Greenway Committees that are official town bodies, approved by Selectmen. Greenway Committees conduct pubic meetings and publish an annual report.
- 6. Article, "Nashua River Greenway is Legacy Finalist" published in Nashua River Watershed Associations (NRWA) Spring 1992 newsletter, ("Watershed") talks about the Greenway being selected as a Massachusetts pilot Forest Legacy Area.
- 7. In updating its Management Plan for the Greenway during 1993, NRWA will solicit extensive public input by having the Greenway Committees conduct formal and informational hearings, informational meetings and write news releases.
- D. The proposed Forest Legacy sections meet the eligibility criteria for a Forest Legacy Area as follows:
 - 1. Forests are threatened by immediate and future conversions to non-forest, house lots.
 - 2. Individual landowners have been approached about selling conservation easements and are interested in selling easements.
 - 3. Scenic resources in all three units are recognized as distinctive.
 - 4. Public has traditionally utilized the three areas for recreation and these are opportunities to extend the existing greenway systems.
 - 5. Numerous private wells, six public water supply wells, and designated "zone 2" drinking water protection areas lie within the sections protection of the water supply sources.
 - 6. Riparian habitat for fish, waterfowl and migratory songbirds, and associated forested wetland plants and animals.
 - 7. Contain rare and endangered flora and fauna.
 - 8. Provide river access to all types of passive recreation including fishing.
 - 9. Contain significant historic sites and potential sites of archeologic importance.
 - 10. Have highly productive floodplain soils for forestry and agriculture.

D. Degree of Threat

1. The Nashua River watershed is surrounded by growing cities of Worcester, Lowell, Fitchburg/Leominster, and Nashua, New Hampshire. Relatively modest land and housing costs, coupled with an excellent highway system, also makes the watershed

2. attractive to commuters to metropolitan Boston, only 30 miles away. The Nashua Valley is expected to experience accelerated urabanization in the 1990s.

No objections were received from the local communities and individuals following Congressional news releases, newspaper articles, public information meetings or when queried on establishing the three sections of the Nashua River Greenway as a Forest Legacy Area.

Forest Legacy Expansion for Watershed Protection

Join the Massachusetts Watershed Coalition in a discussion of how the Forest Legacy Program could be used to benefit water suppliers with limited funding for land protection.

Tuesday, November 221st, 10am-12pm

14 Monument Square, Leominster Downstairs conference room (See directions on reverse.)

Warren Archey DEM Bureau of Forestry PO Box 1433 Pittsfield, MA 01202

Tom Orcutt
Fitchburg Water Department
xx8 Main Street
Fitchburg, MA 01420

Dick O'Brien TTOR 225 Lindell Avenue Leominster, MA 01453

Kathleen O'Connor MA Watershed Coalition PO Box 577 Leominster, MA 01453-0557

Phil Guerin Worcester DPW xx East Worcester Street Worcester, MA 01604 Leigh Youngblood Mt. Grace Land Conservation Trust 137 North Main Street New Salem, MA 01355

Al Futterman Nashua River Watershed Association 592 Main Street Groton, MA 01450

Ed Himlan MA Watershed Coalition PO Box 577 Leominster, MA 01453-0577

Bonnie Booth WCCD 52 Boyden Road Holden, MA 01520-2587

Bob O'Connor MA EOEA 100 Cambridge Street Boston, MA 02202 Judy Judge Fitchburg, Water Department 718 Main Street Fitchburg, MA 01420

Roger Brooks Leominster Water Department 109 Graham Street Leominster, MA 01453

Brandon Kibbe MA Watershed Coalition PO Box 577 Leominster, MA 01453-0577

James French MDC Div. of Watershed Management 180 Beaman Street West Boylston, MA 01583-1199

Nashua River Greenway Forest Legacy Area Expansion

Introduction:

Approximately two-thirds of Massachusetts' population receives their drinking water from the central part of the state. Non-profit source pollution (i.e. land use-related runoff) threatens the integrity of these important surface water resources. Water supply area management and protection are critical to the future integrity of drinking water resources.

Forests play a key role in mitigating the effects of non-point source pollution. Well-managed forests improve infiltration, decreased sedimentation, promote stable channels, reduce nutrient loading, and filter other contaminants from waterways. Forested ecosystems provide many additional benefits as well, such as wildlife habitat, wood products industries, ad recreational opportunities.

Consider these statistics:

62% of MA land is forested 84% of forested land is privately owned

In Massachusetts, watershed health and quality are ultimately determined by the land use practices of private landowners. Water suppliers are generally limited, both practically in their ability to manage their extensive watershed areas. They rely heavily on private landowners to steward the forest resources of Central Massachusetts which provide large high quality water. Faced with increased growth pressures and increasing density of land use, water suppliers need more tools and incentives to offer private landowners for ongoing maintenance of their forested watershed ecosystems.

The Forest Legacy Program (FLP), which provides cost-share funding for the purchase of land and conservation restrictions on forestland, offers the most promising tool for water suppliers. Not only does the Foreet Legacy Program promote the protection of forest and water supply resources, but it also encourages active management of those resources. And, since FLP promotes private lands stewardship, FLP purchased lands allow water suppliers to spend less energy and resources on active management and more effort on monitoring – a decidedly easier and less expensive chore.

The Forest Legacy Program does not, however, have a prominent presence in Central Massachusetts, especially considering the Nashua River Greenway, ad therefore has minimal impact on much of the state's drinking water resources. Areas designated in the North Quabbin and Nashua River Greenway only cover small portions of this region. This limited Forest Legacy Area coverage results in many outstanding land protection opportunities to be missed.

^{1.} On average, 65% of a river's baseflow is from groundwater. During extreme periods of drought, groundwater can account for 100% of water in rivers and streams.

A working group of water suppliers, land trusts, watershed associations, state and federal agencies have joined forces to expand the FLP to cover the entire northern tier of Central Massachusetts. Notably, this proposed expansion would coincide with one of the state's "Focus Areas" for land acquisition and will allow an increased blend of land protection entities including the Department of Environmental Management, The Division of Fisheries and Wildlife and the Metropolitan District Commission (the entity overseeing Boston's public water supply).

Expansion Rationale

The reasoning behind this expansion is simple: create increased opportunities for resource protection, especially oriented toward those lands that provide public drinking water. Most of the land is privately owned and unprotected. Data presented below make the case for expanding the Nashua River Greenway Forest Legacy Area with clear emphasis on public water supply protection.

A. Land Ownership/Protection Information (All data displayed is compiled from 1985-1995 MA GIS information)

1. Permanently Protected Land

| <u>Owner</u> | <u>Acres</u> | <u>Percentage</u> | |
|--------------------|--------------|-------------------|--|
| DEM | 14298 | 3.05% | |
| DFWELE | 6840 | 1.46% | |
| MDC | 3334 | 0.71% | |
| Federal | 6405 | 1.37% | |
| Private Non-Profit | 3129 | 0.67% | |
| Municipal | <u>16726</u> | <u>3.56%</u> | |
| Total: | 50732 | 10.81% | |

2. Semi-protected Land

| Other State (Institutional) | 3350 | 0.07% |
|-----------------------------|------------|--------------|
| Ch. 61 (Forest tax law) | 3378 | 0.72% |
| Ch. 61A (Agland tax law) | 5385 | 1.15% |
| Ch. 61B Recland tax law | 4173 | 0.89% |
| Private (Institutional) | 5154 | 1.10% |
| Inholding (land-locked) | <u>992</u> | <u>0.21%</u> |
| | | |
| Total: | 22432 | 4.29% |

This table reveals that 89% of the property in the expansion area is not permanently protected and most is privately owned.

3. Resource Protection

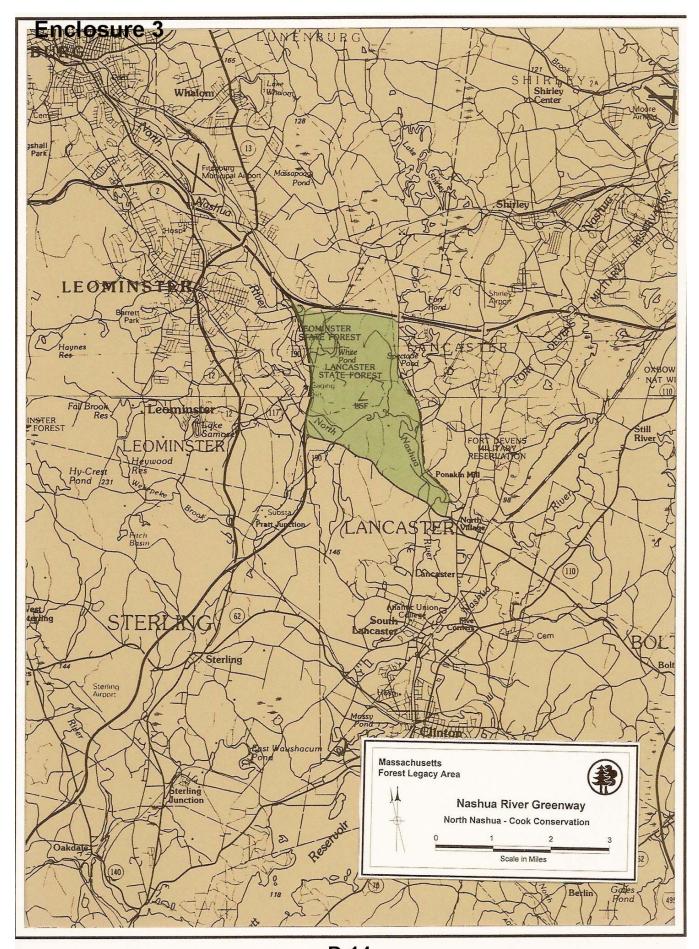
- a. Water supplies in the proposed expansion (Total 25%)
- b. Community Surface Water: 42
- c. Community Ground Water: 108
- d. Non-Transient, Non-Community: 43
- e. Transient, Non-Community: 58
- f. Surface Distribution System: 1
- g. Proposed Well: 6
- 4. Water Supply/Outstanding Resource Water (ORW) Acres (50% of total area)
 - a. Zone II: 6% (Dept. Environmental Protection designated ground water source)
 - b. IWPA: 2% (Interim well-head protection area, prior to Zone II designation)
 - c. ORW-Water Supply: 33%
 - d. ORW-Other: 9%
- 5. Forest Coverage: Land use data analysis incomplete, however initial analysis indicates roughly 75-80% coverage

Scope of proposed Expansion Boundary

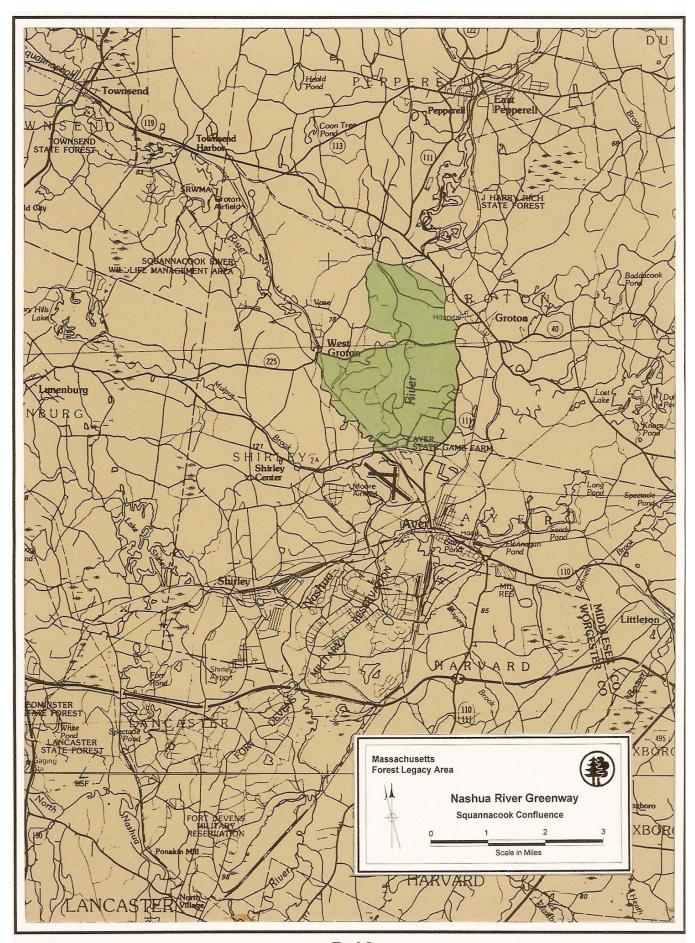
- a. Expand the Nashua Greenway Areas to completely include the Nashua River Basin and extend west to meet the North Quabbin Corridor Forest Legacy Area. This will abut the "Monadnock/Merrimac Uplands Foest Legacy Area" in New Hampshire and provide future opportunities for multi-state acquisitions.
- b. Encompass all of MDC's Ware River and Wachusett Basins (a significant part of Boston's water supply), Worcester's Nashua and Blackstone water supply watersheds, all of Leominster and Fitchburg's water supply areas, and numerous smaller groundwater and surface water supplies.
- c. Boundary detail:
 - 1. On the North: By the MA/NH border
 - 2. On the East: Rte 119, I-495, I-290, and several smaller roads
 - 3. On the South: Several smaller routes
 - 4. On the West: Rte 122, Rte 32, the Tully Brook, and several smaller roads.

Boundary description: Proposed Amendment to the Nashua River Greenway

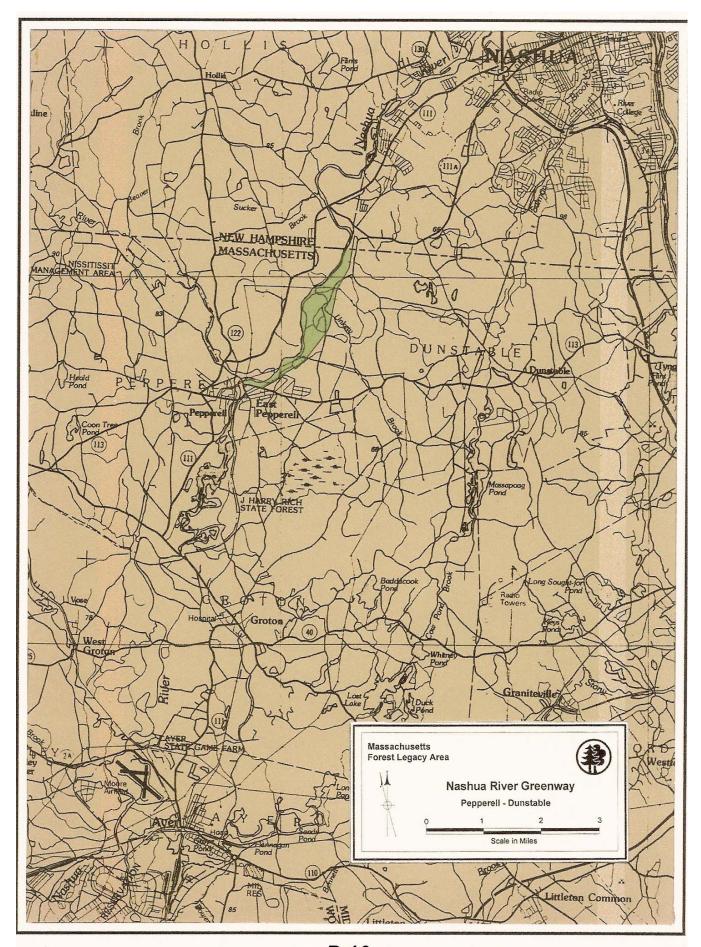
Beginning at the intersection of New Hampshire/Massachusetts state line and Tarbell Brook in the Town of Winchendon (the northeastern corner of the North Quabbin Corridor Forest Legacy Area),



D-14



D-18



D-16

Enclosure 4

Boundaries of proposed addition to the Squannacook Confluence, part of the Nashua River Greenway

Beginning in the Village of West Groton (connecting to the original FLA map),

Thence westerly along Route 225 to the Groton-Townsend town line, a distance of 2.3 miles,

Thence northerly along the Groton-Townsend town line to Route 119, a distance of 3.9 miles,

Thence easterly along Route 119 to Papermill Village, a distance of 3.9 miles,

Thence westerly along Fitch Bridge Road to Gratuity Road, a distance of 0.3 miles (connecting to the original FLA map).

DESCRIPTION: Proposed Amendment to the Nashua River Greenway

Beginning at the intersection of the New Hampshire/Massachusetts state line and Tarbell Brook, in the town of Winchendon (the northeastern corner of the North Quabbin Corridor Forest Legacy Area), Thence easterly along the New Hampshire/Massachusetts state line, along the northern border of the towns of Winchendon, Ashburnham, Ashby, Townsend, Pepperell and Dunstable to the intersection of Hollis Street, a distance of 27.9 miles,

Thence southerly along Hollis Street to the intersection with Route 113, a distance of 1.9 miles,

Thence westerly along Route 113 to Woods Court, a distance of 0.3 miles,

Thence southerly along Woods Court, to Groton Street, a distance of 1.0 miles,

Thence southerly along Groton Street to its intersection with Chicopee Row, at the town line of Dunstable and Groton, a distance of 1.2 miles,

Thence southerly along Chicopee Row to the intersection of Hollis Street, a distance of 4.0 miles, Thence southerly along Hollis Street to Groton Center and the intersection of Route 119, a distance of 0.5 miles,

Thence southerly along Route 119 to Interstate 495, a distance of 11.0 miles,

Thence southerly along Interstate 495, to Interstate 290, a distance of 15.6 miles,

Thence westerly along Interstate 290, to exit 21, a distance of 10.7 miles,

Thence northerly along Northeast Cutoff to East Mountain Street, a distance of 1.6 miles,

Thence westerly along East Mountain Street to the intersection of Route 12 and Doyle Road, a distance of 1.4 miles,

Thence westerly along Doyle Road to Shrewsbury Street, a distance of 1.2 miles,

Thence westerly along Shrewsbury Street to Route 122A (Main Street), a distance of 0.9 miles,

Thence westerly along Route 122A to Salisbury Street, a distance of 0.8 miles,

Thence southerly along Salisbury Street to Fisher Road, a distance of 3.4 miles,

Thence southerly along Fisher Road/Stonehouse Hill Road to Reservoir Street, a distance of 1.8 miles,

Thence southerly along Reservoir Street to Route 122, a distance of 1.3 miles,

Thence easterly along Route 122 to Airport Drive, a distance of 0.3 miles,

Thence southerly along Airport Drive, to Goddard Memorial Drive, a distance of 0.9 miles,

Thence southerly along Goddard Memorial Drive to Route 9, a distance of 1.9 miles,

Thence westerly along Route 9 to Route 56 in Lancaster, a distance of 2.9 miles,

Thence northerly along Route 56 to Whittemore Street, a distance of 0.6 miles,

Thence northerly along Whittemore Street to Hill Street at the Paxton town line, a distance of 2.7 miles,

Thence northerly along Hill Street to Marshall Street, a distance of 0.6 miles,

Thence westerly along Marshall Street to Suomi Street, a distance of 0.1 miles,

Thence northerly on Suomi Street to Route 31, a distance of 1.0 miles,

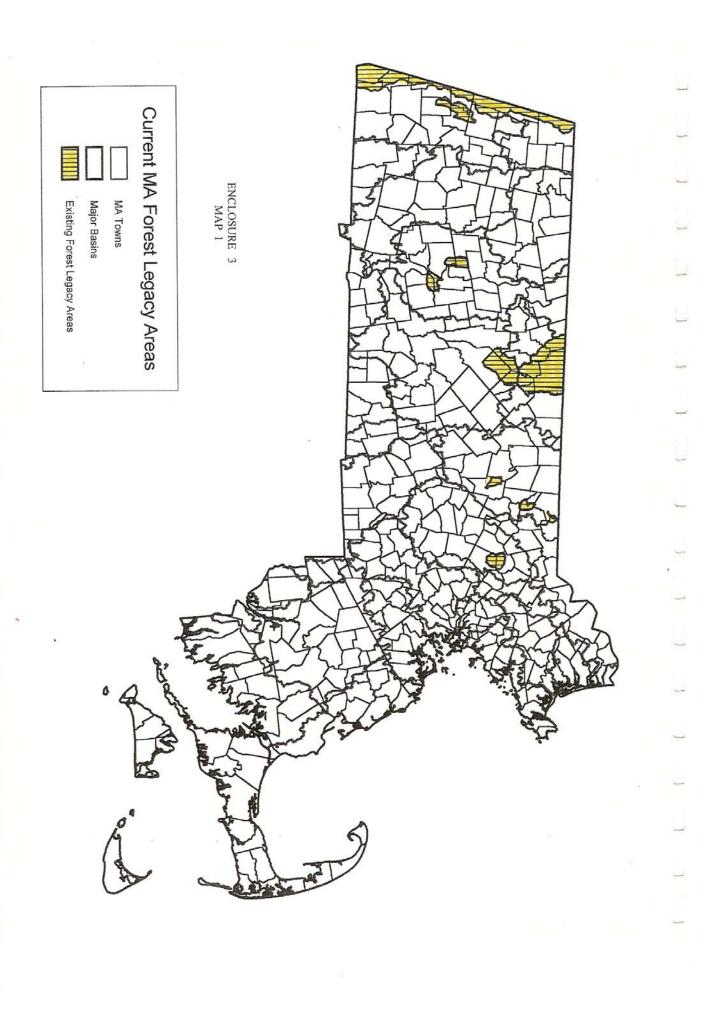
Thence easterly along Route 31 to Route 122 in Paxton Center, a distance of 0.9 miles,

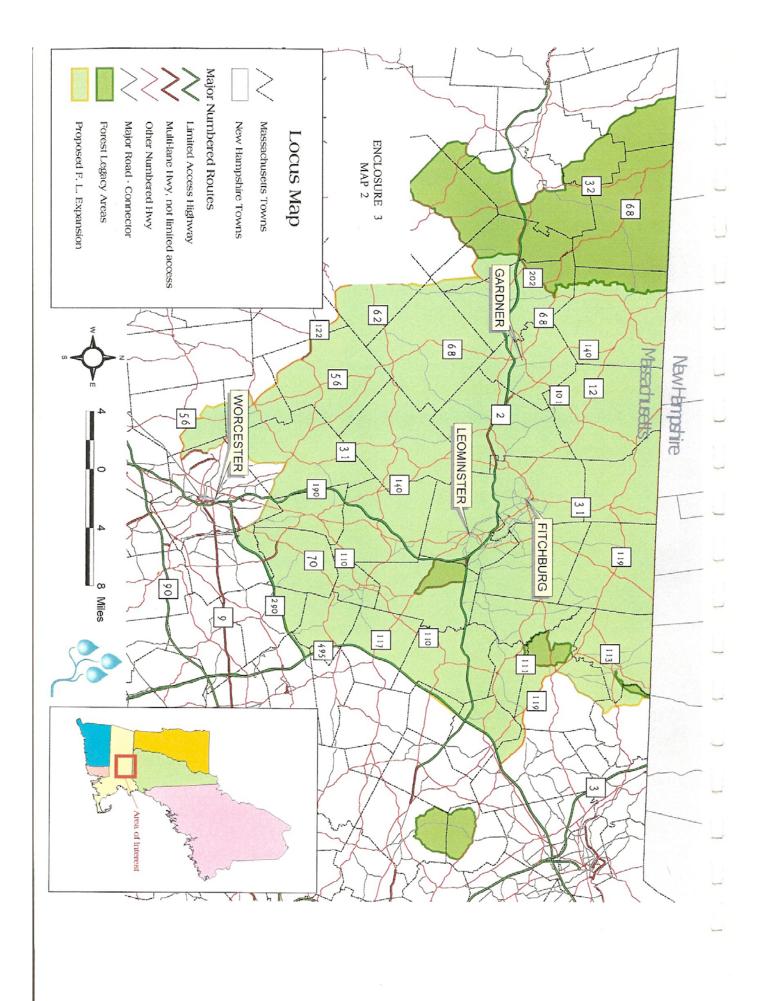
Thence northerly along Route 122 to Route 32, a distance of 12.7 miles,

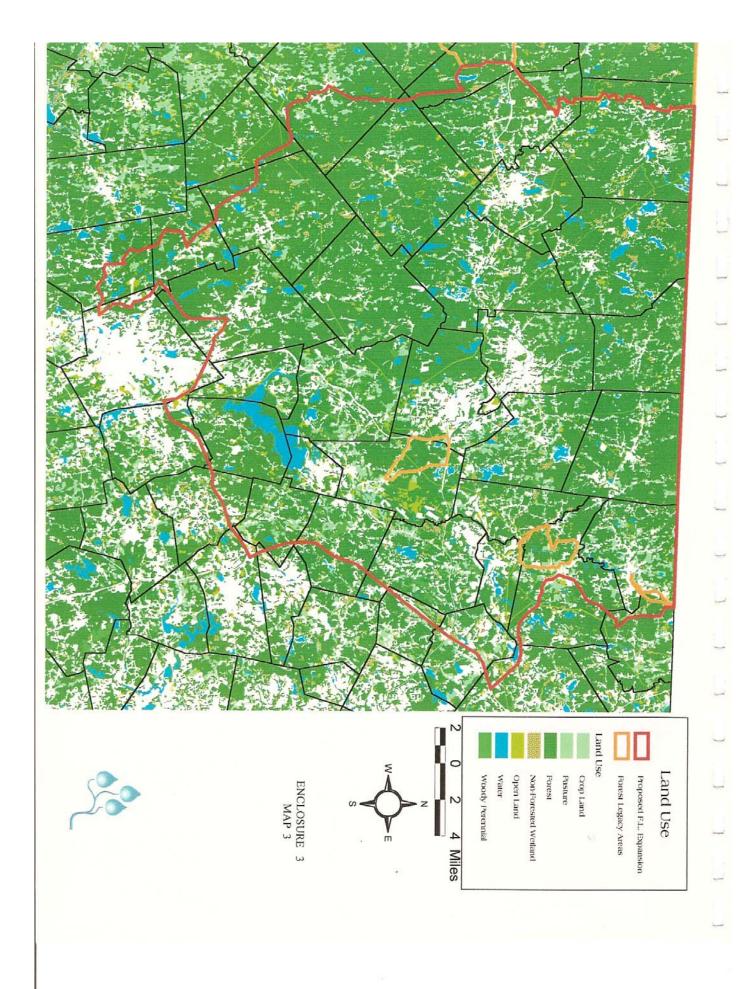
Thence northerly on Route 122/32 to Petersham where Route 122 bears west and Route 32 bears north, a distance of 8.4 miles,

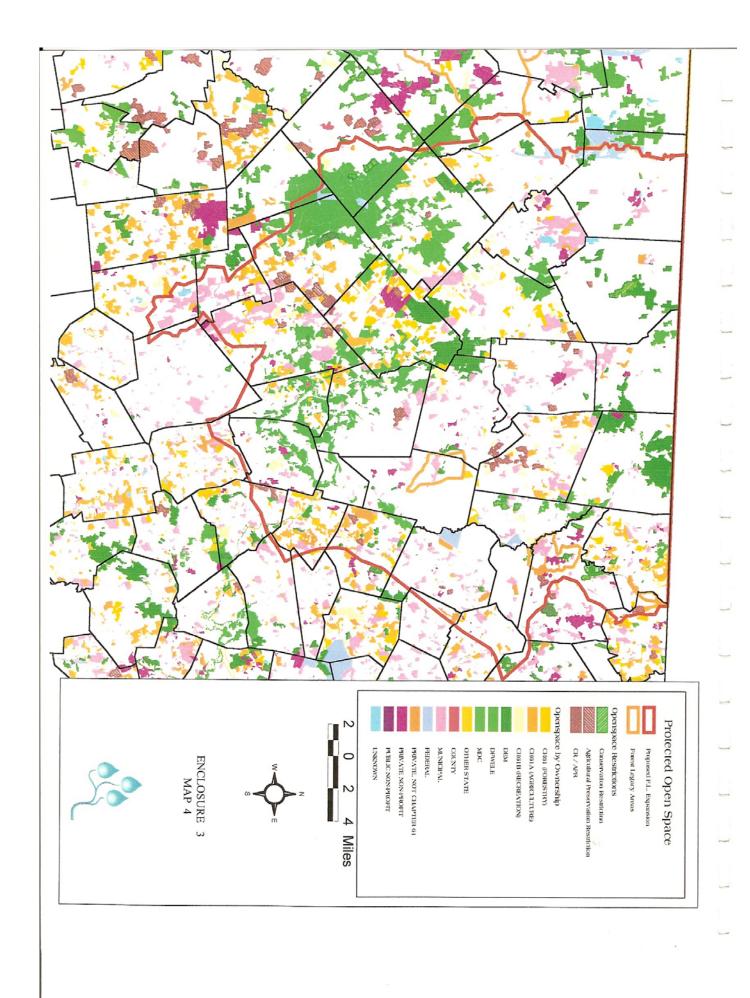
Thence, northerly along Route 32 to West Street, a distance of 0.6 miles, where the proposed Nashua River Greenway Expansion intersects with the North Quabbin Legacy Area Phase I, Thence northerly along the easterly edge of the North Quabbin Legacy Area Phase I boundary, heretofore described in "Forest Legacy Needs Assessment – Massachusetts" to the North Quabbin Legacy Area Phase II boundary,

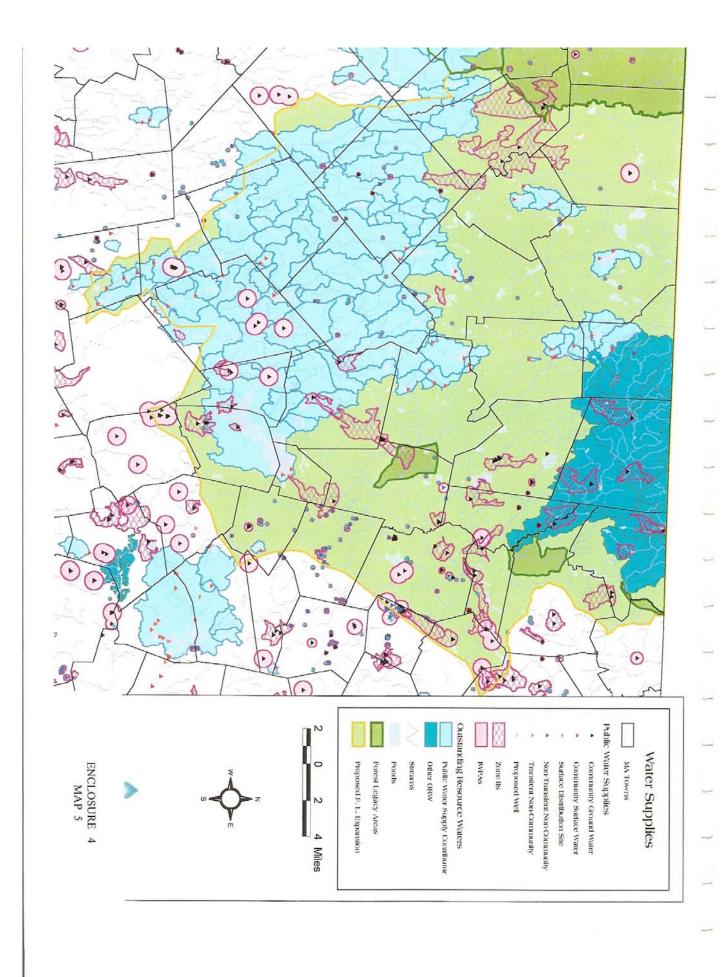
Thence northerly along the easterly edge of the North Quabbin Legacy Area Phase II boundary, heretofore described in the "Forest Legacy Needs Assessment – Massachusetts" to the Massachusetts/New Hampshire State line.



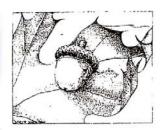








Enclosure 4



Massachusetts Forest Stewardship Program 463 West Street Amherst, MA 01002 phone: 413-256-1201 FAX: 413-253-4375



a program of DEM-Division of Forests & Parks, with funds from USDA-Forest Service

May 12, 1993

Mr. Allen Schacht, Director USDA-Forest Service NE Area State & Private Forestry 5 Radnor Corporate Center 100 Matsonford Road, Suite 200 Radnor, PA 19087

Dear Mr. Schacht,

On behalf of the Statewide Stewardship Coordinating Committee, I am very pleased to submit Massachusetts' Needs Assessment for its Forest Legacy Program. The Committee, and its Forest Legacy Task Force, have reviewed and enthusiastically accepted the assessment.

We are proud that the Forest Legacy Task Force, an appointed subcommittee of the Statewide Stewardship Coordinating Committee, could bring its expertise together quickly and skillfully to produce this document, the first completed in the country. The ease and cooperation with which it accomplished this task truly speaks to our State's track record in land protection work and ability to work together to formulate common goals and land protection strategies to be employed in the Forest Legacy Program.

We are eager to begin the task of assembling these Legacy Areas and look forward to receiving approval of the final Needs Assessment document shortly.

Sincerely,

Susan M. Campbell

Susan M. Campbell Statewide Stewardship Steering Committee Chair Forest Legacy Task Force Member

cc: John Currier, Warren Archey, Tom Quink





Massachusetts Watershed Coalition

PO Box 577 Leominster, MA 01453 978.534.0379 978.534.1329 (fax) mwc@ma.ultranet.com www.ultranet.com/~mwc

March 22, 2001

Mr. Warren Archey, Chief Forester Commonwealth of Massachusetts Division of Forests and Parks, DEM Bureau of Forestry 740 South St. P.O. Box 1433 Pittsfield, MA 01202

Board of Directors

Scott Anderson President

Dick Gelpke Vice President

> Steve Ivas Treasurer

Jerry Schoen Secretary

Barbara Berney

Julia Blatt

Cindy DelPapa Audrey Klein-Leach

Betsy McEvoy

Robert Zimmerman

Dear Mr. Archey:

The Massachusetts Watershed Coalition is writing this letter in support of the proposed Forest Legacy Expansion Area. Through our work with the Pure Water Stewardship Project, we see an urgent need for additional protection of forest lands and drinking water resources in the Nashua and Chicopee river basins.

More than two-thirds of Massachusetts' population receive their drinking water from this part of the state, which is experiencing very rapid growth. Development pressures are quickly transforming forests, fields and wildlife habitats into new homes and businesses. More intensive land use also adversely impacts valuable water supplies by shrinking the amount of undisturbed woodlands available to filter the water replenishing reservoirs and well fields.

<u>Staff</u>

Ed Himlan Executive Director

Michele Bennett Decoteau Circuit Rider

Tom Spiro Watershed Coordinator

Kathleen O'Connor Community Outreach It is essential for water suppliers, non-profits, and federal and state agencies to help landowners preserve the vital forest lands of central Massachusetts. Growth and development will be an ongoing concern, and private stewardship offers a key opportunity to improve forest management, sustain wildlife habitats, and protect drinking supplies for millions of Massachusetts' residents.

We strongly urge expansion of the Forest Legacy Area. This important program can enable landowners to keep their properties in forestry uses, and help rural communities ensure sustainable development patterns for central Massachusetts.

Sincerely,

creating

a network

of watershed

partners

Ed Himlan

Executive Director



Protecting the natural resources of the Sudbury, Assabet and Concord River Valleys since 1953

22 March 2001

Warren Archey, Chief Forester DEM – Bureau of Forestry PO Box 1433 Pittsfield, MA 01202

Dear Mr Archey,

On behalf of the Sudbury Valley Trustees, I'm writing to enthusiastically support the expansion of Forest Legacy areas in central Massachusetts. This expansion promises to bring much-needed attention to a region of the Commonwealth where expansive forests, copious drinking water resources, and diverse wildlife habitats have been increasingly threatened by development pressure. Since most of these resources remain privately owned, expanding the Forest Legacy Program's reach in the region will have a strong positive impact on conservation.

Sudbury Valley Trustees (SVT), founded in 1953, is a regional land trust dedicated to the protection of the natural resources of the Sudbury, Assabet and Concord River's watershed. Currently, SVT owns, through gifts and purchase, more than 80 properties in 14 towns, totaling over 2,000 acres of diverse conservation lands. We also hold conservation easements on nearly 500 acres under private ownership. Additionally, SVT has been instrumental partners in preserving 6,000 acres now under the permanent protection of public agencies, including the Great Meadows National Wildlife Refuge.

The proposed Forest Legacy expansion will cover much of the western portion of SVT's focus area—the part of the watershed that boasts large blocks of single-ownership, contiguous forestland. Here, working lands remain integral parts of the local economy and local landscape. Not only does this represent an important opportunity for protecting large tracks of ecologically significant land, but also for protecting the character of communities and the quality of life in the region.

Sudbury Valley Trustees shares the Forest Legacy Program's commitment to working in close collaboration with landowners, businesses, local conservation commissions and government agencies to protect land. We believe the Forest Legacy Program will be well served by the proposed expansion of Forest Legacy areas in central Massachusetts.

Sincerely,

Stephen T. Johnson Executive Director

1.

March 1, 2001

Mr. Warren Archey, Chief Forester Department of Environmental Management Division of Forests and Parks, Bureau of Forestry P.O. Box 1433, 740 South St. Pittsfield, MA 01202

Dear Mr. Archey:

The Leominster Land Trust is writing in support of the proposed Forest Legacy Expansion Area. In recent years, this area of Central Massachusetts has been experiencing enormous growth and the accompanying pressures that come along with such an expansion. Many local farms and forested areas have been lost to development as more people move to the area and more homes have been built.

An expanded Forest Legacy Area would provide another layer of protection and assistance for landowners looking to protect their land and a way of life. For many, financial considerations play a large part in making a decision to sell. The opportunities offered through the Forest Legacy program may help landowners decide that it is feasible to keep their land. Additionally, it would allow landowners to preserve the land in its natural state through a deed restriction, guaranteeing that the land will remain as the owner intended.

Undeveloped land also provides habitat for different species that see such available areas shrinking. Preservation of natural areas and open space, which contribute to the health and diversity of species, are also a key component to the quality of life people are looking for when they move to more rural areas. Open space provides numerous benefits for both ecological diversity and quality of life.

The Leominster Land Trust supports the proposed Forest Legacy Expansion Area for the benefits such an area will bring to local landowners. This program can be a positive addition to the work the Trust does to preserve open space and natural habitat in the face of expanding growth. We look forward to working with you.

Sincerely

President, Leominster Land Trust



Robert L. Moylan, Jr., P.E. Commissioner 508) 799-1437 tel (508) 799-1448 fax

Andrew C. Murch, P.E. Deputy Commissioner 508) 799-1476

Anthony R. Meriano Assistant Commissioner 508) 799-1476

Administration

Daniel Curtis, Director
(508) 799-1437

Central Garage Thomas H. Garr, Director 508) 799-1501

Engineering Edward J. Carrigan, P.E. Director (508) 799-1459

Sewers Matthew J. Labovites, Director (508) 799-1480

Streets/Sanitation Peter A. Paldino, Director (508) 799-1418

Traffic Engineering Joseph F. Borbone, Director (508) 799-1468

Water/Reservoirs Konstantin Eliadi, Director (508) 799-1485

DEPARTMENT OF PUBLIC WORKS

CITY OF WORCESTER

20 East Worcester Street Worcester, Massachusetts 01604-3695

March 27, 2001

Warren Archey Chief Forester Department of Environmental Management Bureau of Forestry P. O. Box 1433 740 South Street Pittsfield, MA 01202

Dear Mr. Archey,

· and other

The City of Worcester Department of Public Works wishes to extend its support for the proposed Forest Legacy Expansion Area in Central Massachusetts. The proposal would provide much needed assistance in protecting the City's drinking water supply.

717 5 5 1 1 1 4 3 3

Worcester, through its Department of Public Works, Water Operations, provides drinking water to nearly 200,000 people in the City and surrounding towns. Water is supplied from ten (10) small surface water reservoirs within a 41-square mile watershed in adjoining towns north and west of Worcester. The entire watershed is situated within the proposed Forest Legacy expansion area.

While the City has a new, modern water treatment facility, it remains committed to the multiple barrier approach of assuring water quality. Thus, we continue to look at source protection as a key component of our water supply management strategy. The Forest Legacy expansion will assist us in this regard.

Within the water supply watershed Worcester owns, controls and manages almost 6,000 dry land acres. This area is managed solely for water supply purposes. Most of this land is forested and actively managed under the guidance of our staff forester. Timber sales help fund the operation of the water system while the forestry program assures a healthy forest which benefits water quality, yield, and wildlife habitat.

The water supply watershed also contains over 19,000 acres that are not owned or controlled by Worcester DPW. As the wave of development continues its westward march across Massachusetts, much of this acreage is



Warren Archey Page 2 March 27, 2001

threatened. An expanded Forest Legacy area provides another opportunity to protect these lands thereby protecting Worcester's vital drinking water resources.

With land prices in Central Massachusetts skyrocketing, it is increasingly difficult for a water supplier such as Worcester DPW to find the funds necessary for outright purchase of threatened watershed lands. Within this Department there is competition for the limited funds available as spending must be directed toward source protection, treatment, and distribution in order to properly operate a large water system.

The Forest Legacy Expansion provides a potential new source of funds to assist the City in its watershed protection efforts. New and creative partnerships between the City, other water suppliers and private conservation organizations to further protection goals will be greatly enhanced by the Forest Legacy Expansion proposal.

Worcester DPW stands ready to assist you and the Bureau of Forestry in making the expanded Forest Legacy area a reality.

Sincerely,

ROBERT L. MOYLAN, JR., P.E. Commissioner of Worcester Public

Works

{S:\WATER\PHIL\Archey - DEM - Draft.doc}